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PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031

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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	10/605,966
		Filing Date	11/10/2003
		First Named Inventor	Yi-Cheng Yuan
		Art Unit	
		Examiner Name	
Total Number of Pages in This Submission	3	Attorney Docket Number	OTMP0058USA

### ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input checked="" type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <div style="border: 1px solid black; padding: 2px;">Remarks</div>	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please Identify below):
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### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Winston Hsu, Reg. No.: 41,526
Signature	
Date	12/16/2003

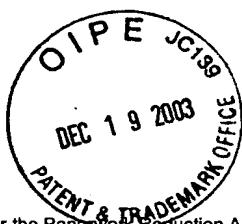
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Typed or printed name		
Signature	Date	

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PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT	(\$ 0.00)
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## Complete if Known

Application Number	10/605,966
Filing Date	11/10/2003
First Named Inventor	Yi-Cheng Yuan
Examiner Name	
Art Unit	
Attorney Docket No.	OTMP0058USA

## METHOD OF PAYMENT (check all that apply)

Check  Credit card  Money Order  Other  None

Deposit Account:

Deposit Account Number  
50-0801  
Deposit Account Name

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1) (\$ 0.00)			

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Independent Claims	Extra Claims	Fee from below	Fee Paid
		-20** =	X	=
		- 3** =	X	=

Large Entity	Small Entity	Fee Description
Fee Code (\$)	Fee Code (\$)	
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2) (\$ 0.00)		

\*\*or number previously paid, if greater; For Reissues, see above

### 3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	
Other fee (specify) _____			

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 0.00)

## SUBMITTED BY

Name (Print/Type)	Winston Hsu	Registration No. (Attorney/Agent)	41,526	Telephone	886289237350
Signature		Date	11/10/2003		

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DEC 19 2003

PTO/SB/02B (11-00)

Approved for use through 10/31/2002. OMB 0651-0032

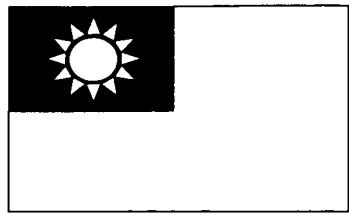
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## **DECLARATION — Supplemental Priority Data Sheet**

#### **Additional foreign applications:**

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# 中華民國經濟部智慧財產局

INTELLECTUAL PROPERTY OFFICE  
MINISTRY OF ECONOMIC AFFAIRS  
REPUBLIC OF CHINA

茲證明所附文件，係本局存檔中原申請案的副本，正確無訛，  
其申請資料如下：

This is to certify that annexed is a true copy from the records of this office of the application as originally filed which is identified hereunder:

申 請 日：西元 2002 年 12 月 27 日  
Application Date

申 請 案 號：091221719  
Application No.

申 請 人：中強光電股份有限公司  
Applicant(s)

局 長

Director General

蔡 繼 生



發文日期：西元 2003 年 8 月 26 日  
Issue Date

發文字號：09220856220  
Serial No.

申請日期：	IPC分類
申請案號：	

(以上各欄由本局填註)

## 新型專利說明書

一 新型名稱	中文	固定結構
	英文	Fixing structure
二 創作人 (共1人)	姓名 (中文)	1. 袁一誠
	姓名 (英文)	1. Yuan Yi-Cheng
	國籍 (中英文)	1. 中華民國 TW
	住居所 (中文)	1. 新竹科學工業園區新竹市力行路11號
	住居所 (英文)	1. No 11, Li Hsing Rd, Science-Based Industrial Park, Hsinchu, Taiwan, R.O.C.
三 申請人 (共1人)	名稱或 姓名 (中文)	1. 中強光電股份有限公司
	名稱或 姓名 (英文)	1. Coretronic Corporation
	國籍 (中英文)	1. 中華民國
	住居所 (營業所) (中文)	1. 新竹科學工業園區新竹市力行路11號 (本地址與前向貴局申請者相同)
	住居所 (營業所) (英文)	1. No 11, Li Hsing Rd, Science-Based Industrial Park, Hsinchu, Taiwan, R.O.C.
代表人 (中文)	1. 張威儀	
代表人 (英文)	1. Wade Chang	



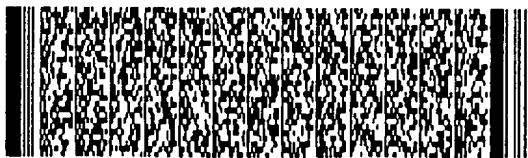
四、中文創作摘要 (創作名稱：固定結構)

一種固定結構係設置於一電控箱內，且包括二導引片及一止擋彈片，當一轉接模組置入電控箱後，利用導引片導引其沿預定方向移動至定位後，止擋彈片彈起並抵制於轉接模組背面而固定，以簡單組裝轉接模組；另外，於電控箱外側鎖入一螺帽時，由於轉接模組具有止擋彈片及導引片之固定機制，可較易鎖固螺帽。

陸、英文創作摘要 (創作名稱：Fixing structure)

Fixing structure

A fixing structure disposed in a controller box, comprises a pair of guide plates and a spring leave. The guide plates guide a tuner into the controller box, and the free end of spring leave faces the guide plates and blocks the rear surface of the tuner, so as to simply assemble the tuner. Otherwise the spring leave and guide plates limit the movements of the tuner, a nut can be fast screwed into the tuner.



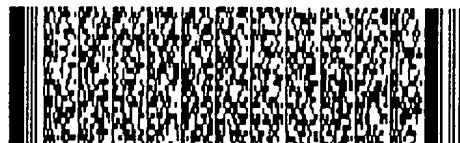
四、中文創作摘要 (創作名稱：固定結構)

伍、(一)、本案代表圖為：第\_4\_圖

(二)、本案代表圖之元件代表符號簡單說明：

轉接模組	1	電控箱	10
連接孔	13	螺帽	14
導引片	21	止擋彈片	22

陸、英文創作摘要 (創作名稱：Fixing structure)



一、本案已向

國家(地區)申請專利

申請日期

案號

主張專利法第一百零五條準用  
第二十四條第一項優先權

二、主張專利法第一百零五條準用第二十五條之一第一項優先權：

申請案號：

日期：

三、主張本案係符合專利法第九十八條第一項第一款但書或第二款但書規定之期間

日期：



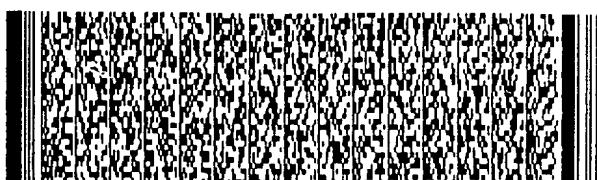
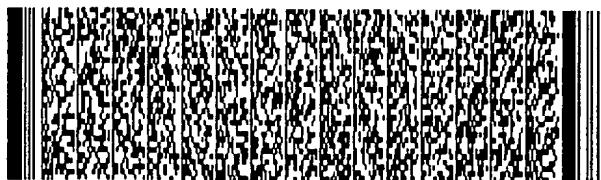
## 五、創作說明（1）

## 【新型所屬之技術領域】

本創作係有關固定結構，尤其係指一種設置於電控箱內之固定結構。

### 【先前技術】

電子設備均需搭配轉接模組接收訊號及電壓，目前隔離技術將各模組裝設於一封閉之電控箱內，以減少外界干擾。而此將帶來各模組上之問題，在產業界為何能達到簡單快速組裝，為本屆競賽之考量下，如何能達到簡單快速組裝，為本屆競賽之考量的。



## 五、創作說明 (2)

### 【新型內容】

本創作之一目的，係提供一種固定結構，利用導引片之導引，以及彈片之抵制固定，而達到簡單組裝及提高組裝效率。

本創作之另一目的，係提供一種固定結構，使轉接模組可快速組裝於電控箱內，而提高組裝效率。

本創作之又一目的，係提供一種固定結構，提供螺帽鎖固於轉接模組時之固定機制，以方便快速組裝螺帽。

為達上述目的，本創作之固定結構係設置於一電控箱內，其包括至少一導引片以及至少一止擋彈片；其中導引片係相對垂設於該電控箱內以形成導引面，止擋彈片係設於導引片後方，並具有一固定端與一自由端，自由端係面向導引片而設，藉由導引片引導一轉接模組至預定位置後，止擋彈片彈起抵制並固定轉接模組。

### 【實施方式】

有關本創作為達到上述目的，所採用之技術手段及其餘功效，茲舉二較佳實施例，並配合圖式加以說明如下：

請參閱第3圖所示，本創作固定結構係設置於一電控箱10內，其包括二導引片21及一止擋彈片22；其中該導引片21係相對垂設於電控箱10之底面11內側以形成一導引路徑，且導引片21與電氣箱10側壁面12間隔一距離設置，以避免側壁面12側緣阻擋



## 五、創作說明 (3)

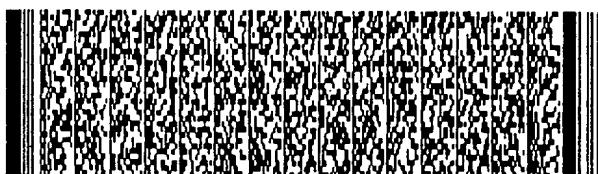
請參閱第4圖所示，係本創作固定結構應用於先置外頭模組1之電導模移轉接模組1，首先將導引片21依輸入轉接模組1之導引面（即導引孔13）套入連接孔13後，並使導引片21與導引孔13對準，再將轉接模組1往X軸方向推入，當導引片21抵達轉接模組1之止擋彈片22時，止擋彈片22彈起並抵住導引片21，此時轉接模組1即被固定於導引孔13上，而達到完成固定組裝轉接模組1。

藉由導引片 21 之設置，而導引轉接模組 1 沿單一軸向移動，定位後再利用彈片彈起並抵制於轉接模組 1



## 五、創作說明 (4)

以上所述，僅用以方便說明本創作之較佳實施例，所做申本創作之範圍不限於該等較佳實施例，凡依本屬本創作的任何變更，於不脫離本創作之精神下，皆



五、創作說明 (5)  
請專利範圍。



## 圖式簡單說明

### 【圖式簡要說明】

第1圖，係習知轉接模組與電控箱之分解圖。  
第2圖，係習知轉接模組與電控箱之組合示意圖。  
第3圖，係本創作第一實施例固定結構之立體圖。  
第4圖，係本創作第一實施例固定轉接模組之示意圖。  
第5圖，係本創作第一實施例鎖固螺帽之作動示意圖。  
第6圖，係本創作第二實施例固定結構之立體圖。  
第7圖，係本創作第二實施例固定轉接模組之示意圖。

### 【圖號簡要說明】

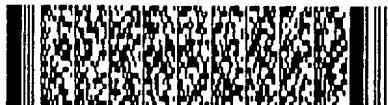
轉接模組	1
輸入接頭	2
電控箱	1 0
底面	1 1
側壁面	1 2
連接孔	1 3
螺帽	1 4
側壁面	1 5
導引片	2 1
自由端	2 1 1
止擋彈片	2 2
固定端	2 2 1
自由端	2 2 2
導引片	3 1
自由端	3 1 1



圖式簡單說明

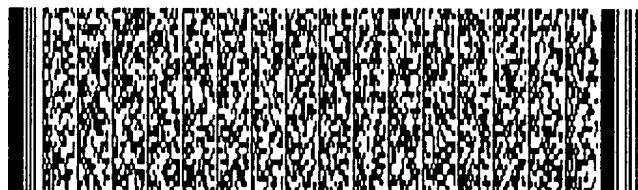
止 檔 彈 片 3 2

自 由 端 3 2 1



## 六、申請專利範圍

- 1、一種固定結構，係設置於一電控箱內，其包括：  
至少一導引片，係垂設於該電控箱內以形成導引面；  
以及  
至少一止擋彈片，係具有一固定端與一自由端，該固定端固設於該電氣箱底面，該自由端係面向導引片。
- 2、申請專利範圍第1項所述之固定結構，其中該導引片具有一彎曲呈直角之自由端。
- 3、如申請專利範圍第1項所述之固定結構，其中該導引片及止擋彈片係與該電控箱一體製成者。
- 4、如申請專利範圍第1項所述之固定結構，其中該導引片申之內側面及電氣箱壁面形成導引面。
- 5、如申請專利範圍第1項所述之固定結構，其中該導引片申之內側面形成導引面。
- 6、如申請專利範圍第1項所述之固定結構，其中該止擋彈片係設於該導引片之後方。
- 7、如申請專利範圍第1項所述之固定結構，其中該導引片申為二個並相對設置於電氣箱內。
- 8、如申請專利範圍第1項所述之固定結構，更包括至少一連接孔開設於電氣箱之一壁面，該導引片係呈倒L形垂直設置於該壁面後方兩側，且該止擋彈片係設於導引片間。
- 9、一種應用申請專利範圍第1項固定結構之轉接模組組裝結構，其包括：



六、申請專利範圍

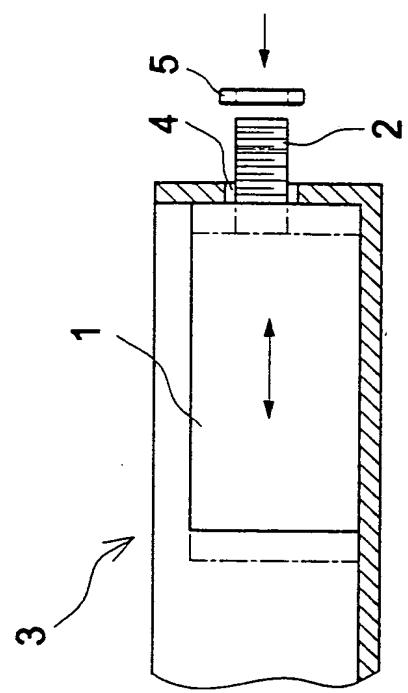
一 固定結構，係具有至少一導引片及止擋彈片；以及

一 轉接模組，係包括一矩形盒體及至少一輸入接頭，矩形盒體前端上緣置於該導引片間，且該止擋彈片抵制於該矩形盒體其背面。

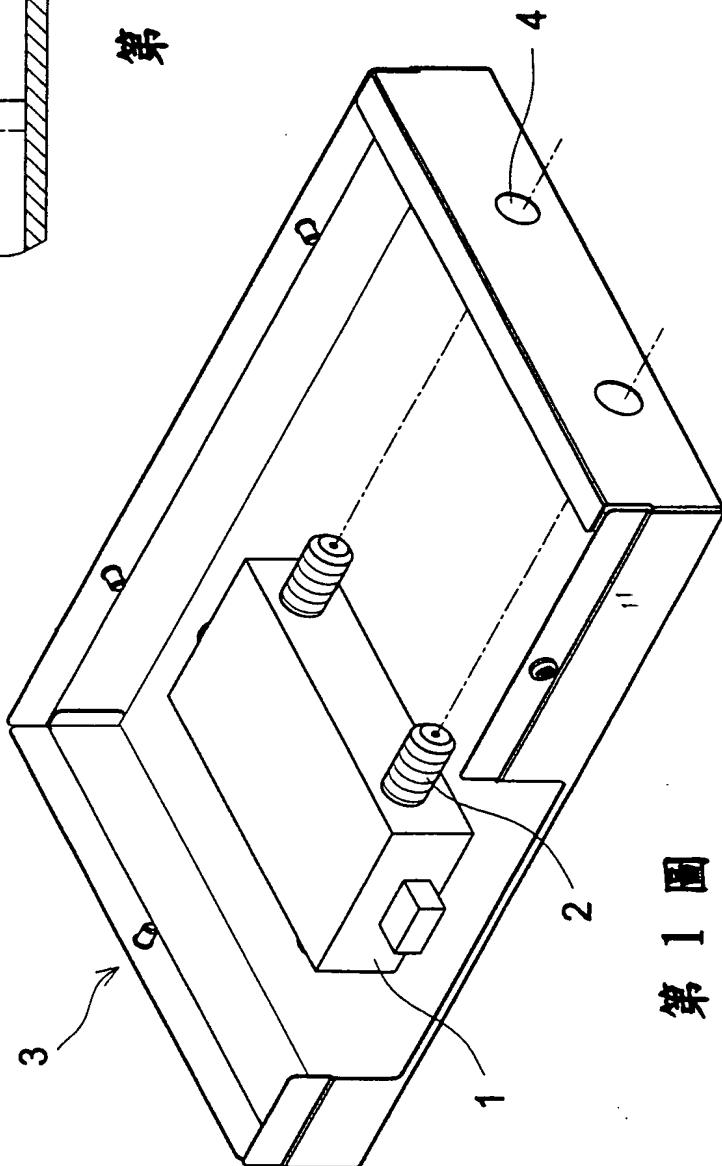
10、如申請專利範圍第9項所述之轉接模組組裝結構，其中該轉接模組可為一調諧器。

11、如申請專利範圍第9項所述之轉接模組組裝結構，其中該導引片之位置係依矩形盒體前端上緣尺寸而設。

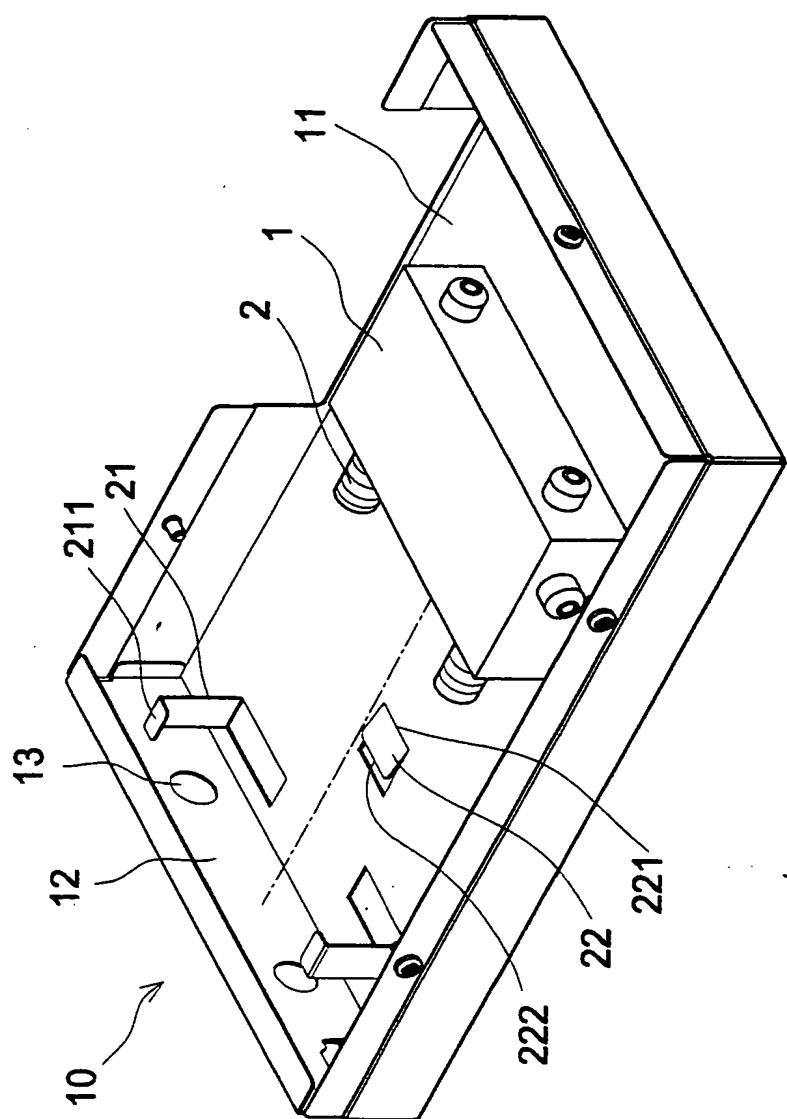




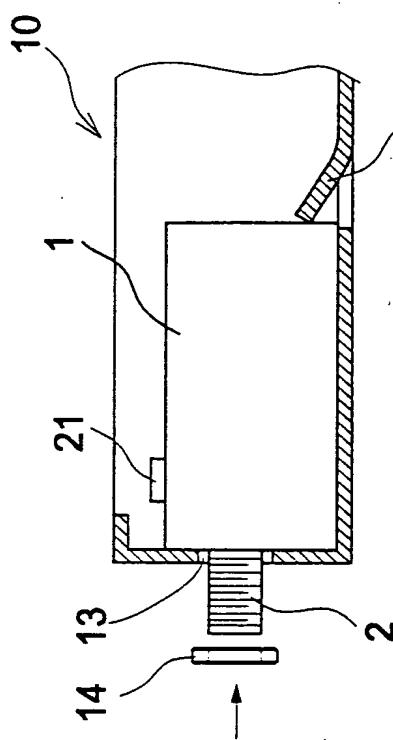
第2圖



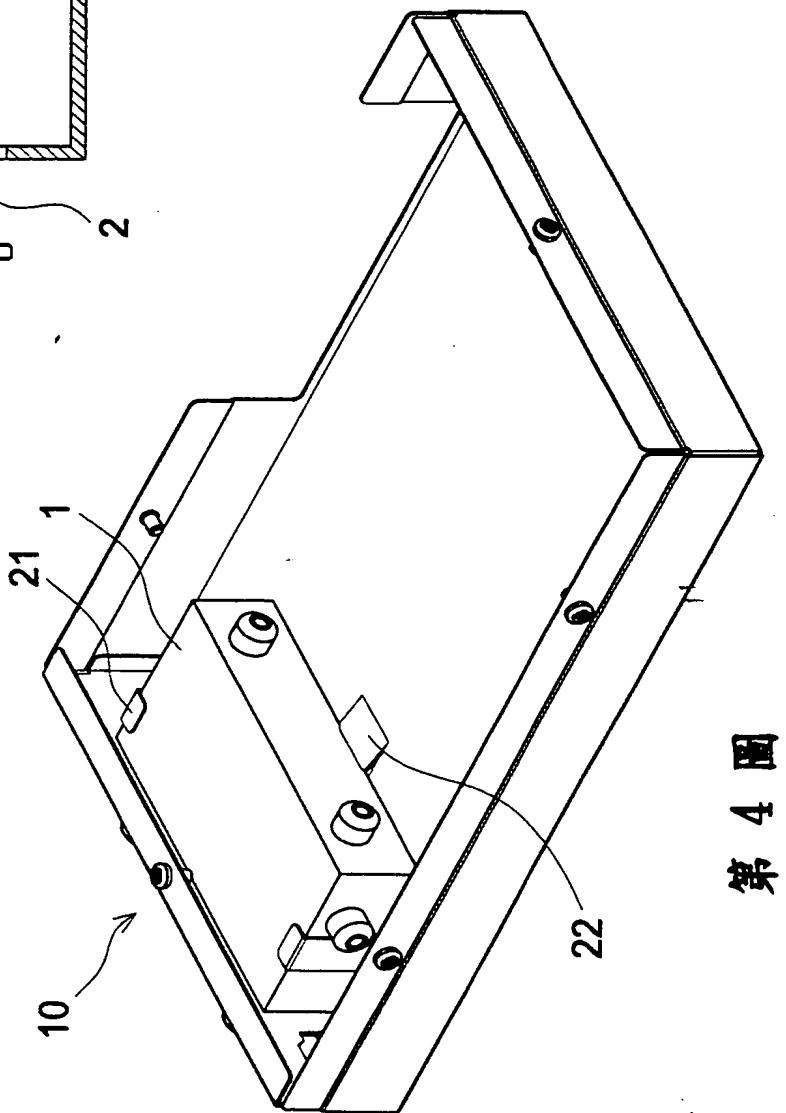
第1圖



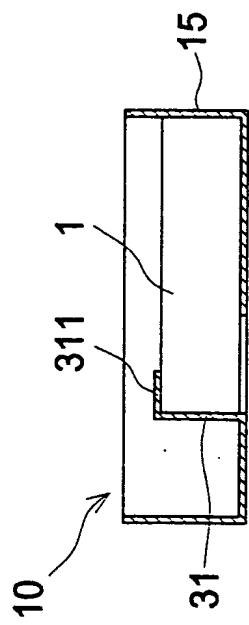
第 3 圖



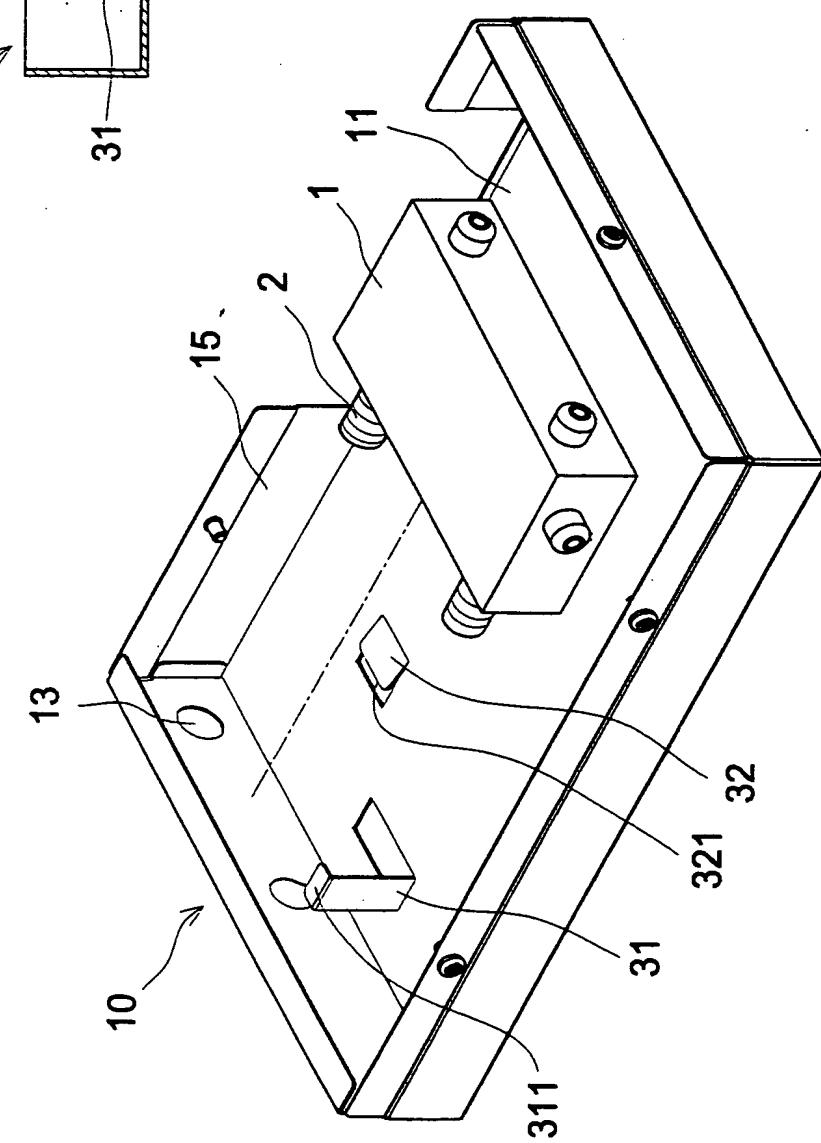
第5圖



第4圖



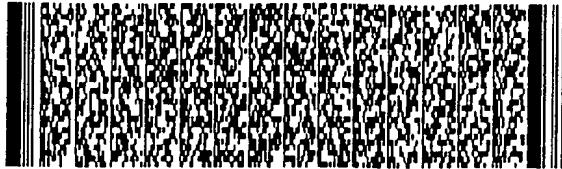
第7圖



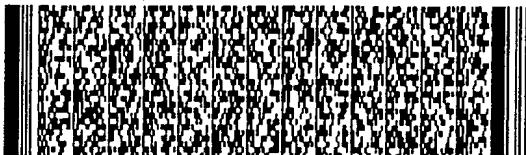
第6圖

申請案件名稱:固定結構

第 1/13 頁



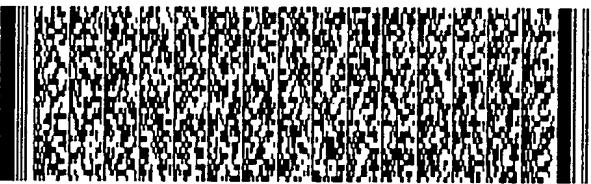
第 2/13 頁



第 4/13 頁



第 5/13 頁



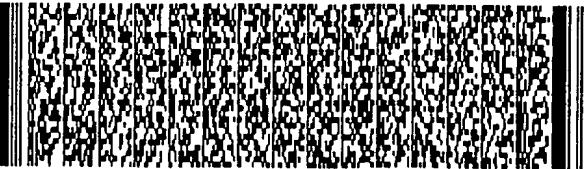
第 6/13 頁



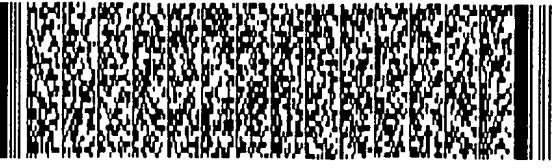
第 7/13 頁



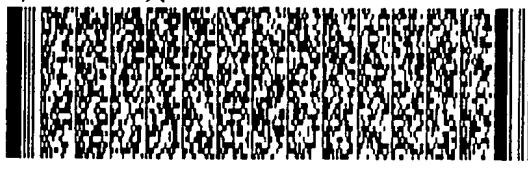
第 8/13 頁



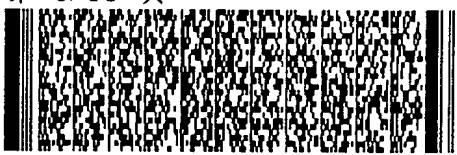
第 10/13 頁



第 2/13 頁



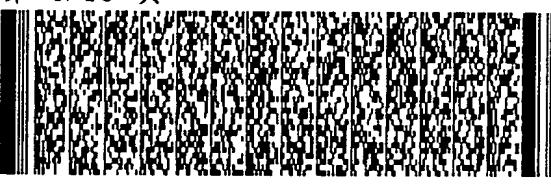
第 3/13 頁



第 5/13 頁



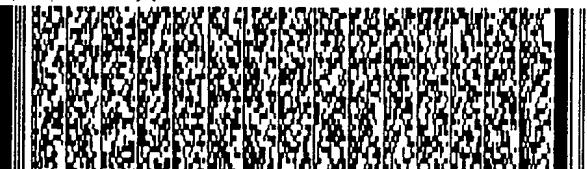
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第 7/13 頁



第 8/13 頁



第 9/13 頁

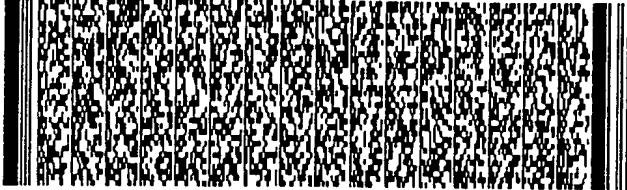


第 11/13 頁



申請案件名稱:固定結構

第 12/13 頁



第 13/13 頁

